

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match.
The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.
Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.120.12.g 12 O'clock (PEER 13) Power-Up Tests

C-A-OPM Procedures in which this Attachment is used.		
4.120.12		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
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Approved: Signature on File _____
 Collider-Accelerator Department Chairman _____ Date _____

V. Castillo

PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title: _____ Checksum: _____

Division B Software Filename and Checksum: Title: _____ Checksum: _____

Initial testing complete:

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: ____/____/____

Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: ____/____/____

Test results reviewed by:

Safety Section Head's Name (Print): _____ Life Number: _____

Safety Section Head's Name (Sign): _____ Date: ____/____/____

Test results accepted by Radiation Safety Committee:

RSC Member's Name (Print): _____ Life Number: _____

RSC Member's Name (Sign): _____ Date: ____/____/____

1.1 Verify steps to place Peer 13 in No Access, Mode 2

<input type="checkbox"/>	PLACE	Peer 13 in Mode 16	
<input type="checkbox"/>	VERIFY	Peer 13 is in Controlled Access	MODE 16
	CLOSE	Peer 13 gate 1GS1	
	RESET	Peer 13 gates: 11GS1, 11EL1, 11GI1, 11MD1, 11ED1, 12MD1, 12MD2, 12GE1, 12GI1, 12EL1, 12ED1	
<input type="checkbox"/>	VERIFY	Peer 13 gates: <input type="checkbox"/> 11GS1, <input type="checkbox"/> 11EL1, <input type="checkbox"/> 11GI1, <input type="checkbox"/> 11MD1, <input type="checkbox"/> 11ED1, <input type="checkbox"/> 12MD1, <input type="checkbox"/> 12MD2, <input type="checkbox"/> 12GE1, <input type="checkbox"/> 12GI1, <input type="checkbox"/> 12EL1, <input type="checkbox"/> 12ED1, are	RESET
	SWEEP	Peer 13 Zones: 11Z1, 12Z1, 12Z2	
<input type="checkbox"/>	VERIFY	Peer 13 Zones: <input type="checkbox"/> 11Z1, <input type="checkbox"/> 12Z1, <input type="checkbox"/> 12Z2 are	SWEPT
<input type="checkbox"/>	PLACE	Peer 13 in Mode 24	
<input type="checkbox"/>	VERIFY	Peer 13 is in No Access	MODE 24
	WAIT	90 secs	
	SET	RHIC Primary BS withdraw command	OUT
<input type="checkbox"/>	VERIFY	MCR sees Peer 13 RHIC Injection inhibit Div A <input type="checkbox"/> & Div B <input type="checkbox"/>	ON
<input type="checkbox"/>	VERIFY	MCR sees Peer 13 RHIC Ring inhibit (BS 1 & 2) Div A <input type="checkbox"/> & Div B <input type="checkbox"/>	OFF
<input type="checkbox"/>	VERIFY	MCR sees Peer 13 Permit Link Div A is	ENABLED
<input type="checkbox"/>	VERIFY	MCR sees Peer 13 Permit Link Div B is	DISABLED
<input type="checkbox"/>	Check for acceptance of Verify steps to place Peer 13 in No Access, Mode 2		

1.2 Test Div A PLC for Power-up conditions

<input type="checkbox"/>	VERIFY	Peer 13 is in No Access	MODE 24
	TURN OFF	AC Power to the Peer 13 Division A PLC	
<input type="checkbox"/>	VERIFY	AC Power to the Peer 13 Division A PLC is	OFF
	WAIT	30 Seconds	
	TURN ON	AC Power to the Peer 13 Division A PLC	
<input type="checkbox"/>	VERIFY	AC Power to the Peer 13 Division A PLC is	ON
<input type="checkbox"/>	VERIFY	MCR sees Peer 13 Division A PLC on Mtc. Status page	MODE 2
<input type="checkbox"/>	VERIFY	Peer 13 Div A gates: <input type="checkbox"/> 11GS1, <input type="checkbox"/> 11EL1, <input type="checkbox"/> 11GI1, <input type="checkbox"/> 11MD1, <input type="checkbox"/> 11ED1, <input type="checkbox"/> 12MD1, <input type="checkbox"/> 12MD2, <input type="checkbox"/> 12GE1, <input type="checkbox"/> 12GI1, <input type="checkbox"/> 12EL1, <input type="checkbox"/> 12ED1 and <input type="checkbox"/> 1GS1, are	NG H/W
	RESET	Div A Hardware Faults	
<input type="checkbox"/>	VERIFY	Div A Hardware Faults are	RESET
<input type="checkbox"/>	VERIFY	MCR sees Div A RHIC Injection inhibit	ON
<input type="checkbox"/>	VERIFY	MCR sees Div A RHIC Ring inhibit (BS 1 & 2)	ON
<input type="checkbox"/>	VERIFY	MCR sees Div A Permit Link is	DISABLED

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|--------------------------|---|---|------------------|
| <input type="checkbox"/> | VERIFY | Peer 13 Div A gates: <input type="checkbox"/> 11GS1, <input type="checkbox"/> 11EL1, <input type="checkbox"/> 11GI1, <input type="checkbox"/> 11MD1, <input type="checkbox"/> 11ED1, <input type="checkbox"/> 12MD1, <input type="checkbox"/> 12MD2, <input type="checkbox"/> 12GE1, <input type="checkbox"/> 12GI1, <input type="checkbox"/> 12EL1, <input type="checkbox"/> 12ED1 and <input type="checkbox"/> 1GS1, are | CLOSED |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 Div A Crash Systems are | OK |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 Div A Zones are | NO SWEEP |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 Div B: <input type="checkbox"/> Mode, <input type="checkbox"/> H/W Faults, <input type="checkbox"/> RHIC Inj inh, <input type="checkbox"/> RHIC Ring inh, <input type="checkbox"/> Perm. Link, <input type="checkbox"/> Gates, <input type="checkbox"/> Crash, <input type="checkbox"/> Zones | NO CHANGE |
| <input type="checkbox"/> | Check for acceptance of Test Div A PLC for Power-up conditions | | |

1.3 Test Div B PLC for Power-up conditions

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|--------------------------|---|---|------------------|
| <input type="checkbox"/> | VERIFY | Peer 13 Div B is still in No Access | MODE 24 |
| <input type="checkbox"/> | TURN OFF | AC Power to the Peer 13 Division B PLC | |
| <input type="checkbox"/> | VERIFY | AC Power to the Peer 13 Division B PLC is | OFF |
| | WAIT | 30 Seconds | |
| <input type="checkbox"/> | TURN ON | AC Power to the Peer 13 Division B PLC | |
| <input type="checkbox"/> | VERIFY | AC Power to the Peer 13 Division B PLC is | ON |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 Division B PLC on Mtc. Status page | MODE 2 |
| <input type="checkbox"/> | VERIFY | Peer 13 Div B gates: <input type="checkbox"/> 11GS1, <input type="checkbox"/> 11EL1, <input type="checkbox"/> 11GI1, <input type="checkbox"/> 11MD1, <input type="checkbox"/> 11ED1, <input type="checkbox"/> 12MD1, <input type="checkbox"/> 12MD2, <input type="checkbox"/> 12GE1, <input type="checkbox"/> 12GI1, <input type="checkbox"/> 12EL1, <input type="checkbox"/> 12ED1 and <input type="checkbox"/> 1GS1, are | NG H/W |
| | RESET | Div B Hardware Faults | |
| <input type="checkbox"/> | VERIFY | Div B Hardware Faults are | RESET |
| <input type="checkbox"/> | VERIFY | MCR sees Div B RHIC Injection inhibit | ON |
| <input type="checkbox"/> | VERIFY | MCR sees Div B RHIC Ring inhibit (BS 1 & 2) | ON |
| <input type="checkbox"/> | VERIFY | MCR sees Div B Permit Link is | DISABLED |
| <input type="checkbox"/> | VERIFY | Peer 13 Div B gates: <input type="checkbox"/> 11GS1, <input type="checkbox"/> 11EL1, <input type="checkbox"/> 11GI1, <input type="checkbox"/> 11MD1, <input type="checkbox"/> 11ED1, <input type="checkbox"/> 12MD1, <input type="checkbox"/> 12MD2, <input type="checkbox"/> 12GE1, <input type="checkbox"/> 12GI1, <input type="checkbox"/> 12EL1, <input type="checkbox"/> 12ED1 and <input type="checkbox"/> 1GS1, are | CLOSED |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 Div B Crash Systems are | OK |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 Div B Zones are | NO SWEEP |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 Div A: <input type="checkbox"/> Mode, <input type="checkbox"/> H/W Faults, <input type="checkbox"/> RHIC Inj inh, <input type="checkbox"/> RHIC Ring inh, <input type="checkbox"/> Perm. Link, <input type="checkbox"/> Gates, <input type="checkbox"/> Crash, <input type="checkbox"/> Zones | NO CHANGE |
| | PLACE | Peer 13 in Mode 8 | |
| <input type="checkbox"/> | VERIFY | Peer 13 is in Restricted Access | MODE 8 |
| <input type="checkbox"/> | VERIFY | Peer 13 gates: <input type="checkbox"/> 11GS1, <input type="checkbox"/> 11EL1, <input type="checkbox"/> 11GI1, <input type="checkbox"/> 11MD1, <input type="checkbox"/> 11ED1, <input type="checkbox"/> 12MD1, <input type="checkbox"/> 12MD2, <input type="checkbox"/> 12GE1, <input type="checkbox"/> 12GI1, <input type="checkbox"/> 12EL1, <input type="checkbox"/> 12ED1 and <input type="checkbox"/> 1GS1, are | CLOSED |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 Crash Systems Div A <input type="checkbox"/> & Div B <input type="checkbox"/> are | OK |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 Zones Div A <input type="checkbox"/> & Div B <input type="checkbox"/> are | NO SWEEP |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 RHIC Injection inhibit Div A <input type="checkbox"/> & Div B <input type="checkbox"/> | ON |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 RHIC Ring inhibit (BS 1 & 2) Div A <input type="checkbox"/> & Div B <input type="checkbox"/> | ON |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 13 Permit Link Div A <input type="checkbox"/> & Div B <input type="checkbox"/> | DISABLED |
| <input type="checkbox"/> | Check for acceptance of Test Div B PLC for Power-up conditions | | |

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: ____/____/____

TTL: Sign for completion of final testing: _____

Date: ____/____/____